



## SEQUENCE LISTING

<110> Kaytes, Paul  
Teng, Chi-Hse

<120> Single Nucleotide Polymorphisms Diagnostic for Schizophrenia

<130> 01313.PRO1

<160> 42

<170> PatentIn version 3.0

<210> 1  
<211> 3080  
<212> DNA  
<213> Homo sapiens

<220>  
<221> variation  
<222> (194)..(194)  
<223> polymorphism G or A

<220>  
<221> variation  
<222> (601)..(601)  
<223> polymorphism A or G

<220>  
<221> variation  
<222> (1029)..(1029)  
<223> polymorphism A or G

<220>  
<221> variation  
<222> (1038)..(1038)  
<223> polymorphism C or G

<220>  
<221> variation  
<222> (1074)..(1074)  
<223> polymorphism A or C

<220>  
<221> variation  
<222> (2106)..(2106)  
<223> polymorphism G or A

<220>  
<221> variation  
<222> (2185)..(2185)  
<223> polymorphism G or A

<220>  
<221> variation  
<222> (2359)..(2359)  
<223> polymorphism T or G

<220>  
<221> variation  
<222> (2663)..(2663)  
<223> polymorphism C or G

<220>  
<221> variation  
<222> (2796)..(2796)  
<223> polymorphism A or G

<400> 1  
agtaggaatc agatagcgag attgattaat aataatactt atcactcttt ataacttgaa 60  
aagcaagttc acaaagtgtct ctaaagtcac agccctgtac tggaaagaga gttgaaccct 120

tcttcaggaa gacaataata taataataac aatatttttct tcactctgca gtgtctttac	180
attccagggt tggnaacatt actgaggatt ctcttcccat tttccagttt cctgttcatt	240
attcttattt ttttgactgc ttttagcatc gggagcacia aggccagtca ccaggaattg	300
caaacaaatg cgtagtcaga gagagagggc tcactgcca tttgtcatgt ggatgcagac	360
acattgcaga tgtgttccca gtaacaatgt cttgagaaga ggactgggtc ttcaccagc	420
atctcagaaa tgccggtgtg tctaaacagc atgtcgttct ttaatgcttt catgcaatat	480
attttatcaa tctcaagttc ccctcactat gtattataat aatttctgct tgttggtaac	540
caatgcagat ggaaaattga ttcttaacag aagagaaaaga gccaagtatt gatgcttact	600
ntttacacc tattgtatct ttgtaacaaa aaccgggtg gctaagttat gattgggaac	660
aagggaatgg ttcaagtcta tgcactaagg aaaaacaaat ctttggccta aaacaataat	720
gataatagaa tttaatatag agtagagacc tgtttttag aataactttc ctagtaatca	780
ctgttgaaaa taatcatact agttcacacc gcgcactaca gggattccat cgagggattt	840
tcccatgtaa ggcatttatt tagctaaaag gacttcatct ttaaggcggg aatgcaggac	900
agataacaga gataagata acaggagggt atctttcagc tccataatta cattccatat	960
cagcgactgt tgcacagaga aactcaaaag gtaaaaataa aatatgaaag gatatttaaa	1020
atcaaaagna attttatnaa attaaagaca tgagacattt atcagttgaa acantctcca	1080
ataatcttgt gcaatataat ttttgtcaaa ttttattttg tcataaacat ttgggattta	1140
taataaaaaat ggaaacttga aaaattatat tagagataat atctgatcat ttcctctggc	1200
atcctgggtg atatgtgttt tttccgcag gagcactgaa aatcaggaac aatcctgtat	1260
tttttgtgat aatcaacaag gacaaaactt ctccatatgt aaataacagc gttatgagca	1320
gcaattcatc cctgctgggt gctgtgcagc tgtgtctacgc gaacgtgaat gggctcctgtg	1380
tgaaaatccc ctctcgcgcg ggatcccggg tgattctgta catagtgttt ggctttgggg	1440
ctgtgctggc tgtgtttgga aacctcctgg tgatgatttc aatcctccat ttcaagcagc	1500
tgcactctcc gaccaatttt ctctgtgcct ctctggcctg cgctgatttc ttggtgggtg	1560
tgactgtgat gcccttcagc atggtcagga cgggtggagag ctgctggtat tttgggagga	1620
gtttttgtac tttccacacc tgctgtgatg tggcattttg ttactcttct ctctttcact	1680
tgtgtttcat ctccatcgac aggtacattg cggttactga cccctgggtc taccctacca	1740
agttcacctg atctgtgtca ggaatttgca tcagcgtgtc ctggatcctg cccctcatgt	1800
acagcgggtg tgtgttctac acagggtgtc atgacgatgg gctggaggaa ttatctgatg	1860
ccctaaactg tataggaggt tgtcagaccg ttgtaaatca aaactgggtg ttgacagatt	1920
ttctatcctt ctttatacct acctttatta tgataattct gtatggtaac atatttcttg	1980
tggctagacg acaggcgaaa aagatagaaa atactggtag caagacagaa tcatcctcag	2040
agagttacaa agccagagtg gccaggagag agagaaaagc agctaaaacc ctgggggtca	2100
cagtgnatgc atttatgatt tcatggttac catatagcat tgattcatta attgatgcct	2160
ttatgggctt tataaccctt gcctntattt atgagatttg ctggttggtg gcttattata	2220
actcagccat gaatcctttg atttatgctt ttttttacc atggtttagg aaagcaataa	2280
aagttattgt aactggtcag gttttaaaga acagttcagc aacctgaat ttgttttctg	2340
aacatatata agcagttgna tagacgaagt tcaggatacc tttaaaatta ccaagcgaag	2400
tgagttttta aaaatcaagt aagactatga atgaatagca aataaattgc tcttcaaatg	2460
aaaaacaaat caatgttttt cagtcttggt aagatgtgca ctttcctgtc ccttctgcaa	2520
aagtatttac ttggctaaca aatgttaaat tcctatttgt taactgcttt agagctcagc	2580

atatccact cctgcagac actttttgtc ttttaatcca ttgactcttc cctctgctct 2640  
 ggtatttttc ctaaaaatat ttntgttttt ttttttttta tttattccct ttcctctttt 2700  
 ctttaciaag ctttctactc tttcccagcc tgccaaaaat ttcatttggtg aatagccttt 2760  
 atcaaattat tggtttcttt tgctttgggtt attttncac aggagtcctt ttaggtatta 2820  
 atttaattta ttcaatcttg ggagagatct caggggtgtat ggggcaattt gcaaatgaag 2880  
 acatcatctt gaccaggctg ttgtaattgt caaacagtt actgtcattc ttgtaattat 2940  
 ttcctccccc aaagtgggaa gcagaagcca ctgtacttcc cagaatgatg ttaggatgat 3000  
 tatttggtg ctgttcttgc tattgcacaa aactgtttta agagtggta tgaatagagc 3060  
 cctgtgttac attattcagt 3080

<210> 2  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> VARIANT  
 <222> (265)..(265)  
 <223> Polymorphic Amino Acid Val or Ile

<220>  
 <221> VARIANT  
 <222> (291)..(291)  
 <223> Polymorphic Amino Acid Cys or Tyr

<400> 2  
 Met Ser Ser Asn Ser Ser Leu Leu Val Ala Val Gln Leu Cys Tyr Ala  
 1 5 10 15  
 Asn Val Asn Gly Ser Cys Val Lys Ile Pro Phe Ser Pro Gly Ser Arg  
 20 25 30  
 Val Ile Leu Tyr Ile Val Phe Gly Phe Gly Ala Val Leu Ala Val Phe  
 35 40 45  
 Gly Asn Leu Leu Val Met Ile Ser Ile Leu His Phe Lys Gln Leu His  
 50 55 60  
 Ser Pro Thr Asn Phe Leu Val Ala Ser Leu Ala Cys Ala Asp Phe Leu  
 65 70 75 80  
 Val Gly Val Thr Val Met Pro Phe Ser Met Val Arg Thr Val Glu Ser  
 85 90 95  
 Cys Trp Tyr Phe Gly Arg Ser Phe Cys Thr Phe His Thr Cys Cys Asp  
 100 105 110  
 Val Ala Phe Cys Tyr Ser Ser Leu Phe His Leu Cys Phe Ile Ser Ile  
 115 120 125  
 Asp Arg Tyr Ile Ala Val Thr Asp Pro Leu Val Tyr Pro Thr Lys Phe  
 130 135 140  
 Thr Val Ser Val Ser Gly Ile Cys Ile Ser Val Ser Trp Ile Leu Pro  
 145 150 155 160  
 Leu Met Tyr Ser Gly Ala Val Phe Tyr Thr Gly Val Tyr Asp Asp Gly  
 165 170 175  
 Leu Glu Glu Leu Ser Asp Ala Leu Asn Cys Ile Gly Gly Cys Gln Thr  
 180 185 190  
 Val Val Asn Gln Asn Trp Val Leu Thr Asp Phe Leu Ser Phe Phe Ile  
 195 200 205  
 Pro Thr Phe Ile Met Ile Ile Leu Tyr Gly Asn Ile Phe Leu Val Ala  
 210 215 220  
 Arg Arg Gln Ala Lys Lys Ile Glu Asn Thr Gly Ser Lys Thr Glu Ser

225		230		235		240
Ser Ser Glu Ser Tyr Lys Ala Arg Val Ala Arg Arg Glu Arg Lys Ala		245		250		255
Ala Lys Thr Leu Gly Val Thr Val Xaa Ala Phe Met Ile Ser Trp Leu		260		265		270
Pro Tyr Ser Ile Asp Ser Leu Ile Asp Ala Phe Met Gly Phe Ile Thr		275		280		285
Pro Ala Xaa Ile Tyr Glu Ile Cys Cys Trp Cys Ala Tyr Tyr Asn Ser		290		295		300
Ala Met Asn Pro Leu Ile Tyr Ala Leu Phe Tyr Pro Trp Phe Arg Lys		305		310		315
Ala Ile Lys Val Ile Val Thr Gly Gln Val Leu Lys Asn Ser Ser Ala		325		330		335
Thr Met Asn Leu Phe Ser Glu His Ile		340		345		
<210>	3					
<211>	24					
<212>	DNA					
<213>	Artificial					
<220>						
<223>	oligonucleotide					
<400>	3					
agtaggaatc	agatagcgag attg					24
<210>	4					
<211>	24					
<212>	DNA					
<213>	Artificial					
<220>						
<223>	oligonucleotide					
<400>	4					
actgaataat	gtaacacagg gctc					24
<210>	5					
<211>	20					
<212>	DNA					
<213>	Artificial					
<220>						
<223>	oligonucleotide					
<400>	5					
tcgctagtca	gagagagagg					20
<210>	6					
<211>	21					
<212>	DNA					
<213>	Artificial					
<220>						
<223>	oligonucleotide					
<400>	6					
agccagcaca	gccccaaagc c					21
<210>	7					
<211>	21					
<212>	DNA					
<213>	Artificial					
<220>						
<223>	oligonucleotide					
<400>	7					
tctatgacga	tgggctgag g					21

<210> 8	
<211> 21	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 8	
atagacgaag ttcaggatac c	21
<210> 9	
<211> 15	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 9	
cagggttggg aacat	15
<210> 10	
<211> 16	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 10	
agggttgga acatta	16
<210> 11	
<211> 20	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 11	
atccttacta tttacaccct	20
<210> 12	
<211> 18	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 12	
atgcttactg tttacacc	18
<210> 13	
<211> 19	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	
<400> 13	
tgctcttaat ttgataaaa	19
<210> 14	
<211> 19	
<212> DNA	
<213> Artificial	
<220>	
<223> oligonucleotide	

<400> 14 tgctcttaat ttcataaaa	19
<210> 15 <211> 20 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 15 tcataaatgc taccactgtg	20
<210> 16 <211> 22 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 16 aatcataaat gctatcactg tg	22
<210> 17 <211> 15 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 17 ccctgcctgt attta	15
<210> 18 <211> 16 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 18 ccctgccta tattta	16
<210> 19 <211> 20 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 19 taagcagttg tatagacgaa	20
<210> 20 <211> 20 <212> DNA <213> Artificial	
<220> <223> oligonucleotide	
<400> 20 atataagcag ttggatagac	20
<210> 21 <211> 30 <212> DNA <213> Artificial	
<220>	

<223> oligonucleotide  
 <400> 21  
 aatattttct tcactctgca gtgtctttac 30  
  
 <210> 22  
 <211> 23  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 22  
 aggaaactgg aaaatgggaa gag 23  
  
 <210> 23  
 <211> 23  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 23  
 gttggtaacc aatgcagatg gaa 23  
  
 <210> 24  
 <211> 22  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 24  
 gaaccattcc cttgttccca at 22  
  
 <210> 25  
 <211> 22  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 25  
 gcgactgttg cacagagaaa ct 22  
  
 <210> 26  
 <211> 29  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 26  
 tattggagat tgtttcaact gataaatgt 29  
  
 <210> 27  
 <211> 27  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
 <400> 27  
 gacagaatca tcctcagaga gttacaa 27  
  
 <210> 28  
 <211> 25  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 28  
 taaagcccat aaagcatca attaa 25

<210> 29  
 <211> 30  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 29  
 gttaccatat agcattgatt cattaattga 30

<210> 30  
 <211> 26  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 30  
 tggctgagtt ataataagca caccaa 26

<210> 31  
 <211> 25  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 31  
 aaagaacagt tcagcaacca tgaat 25

<210> 32  
 <211> 33  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 32  
 atttatttgc tattcattca tagtcttact tga 33

<210> 33  
 <211> 91  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 33  
 gagagacaga atcatcctca gagagttaca acacagtgggt agcatttatg attgatccgt 60  
 atgggtaatt gatgccttta tgggctttat c 91

<210> 34  
 <211> 91  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide  
 <400> 34  
 gagagacaga atcatcctca gagagttaca acacagtgat agcatttatg attgatccgt 60  
 atgggtaatt gatgccttta tgggctttat c 91



<210> 35  
 <211> 61  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 35  
 gagacagaat catcctcaga gagttacaac acagtggtag catttatgat tgatccgtat 60  
 g 61  
  
 <210> 36  
 <211> 37  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 36  
 gataaagccc ataaaggcat caattaacat acggatc 37  
  
 <210> 37  
 <211> 61  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 37  
 gagacagaat catcctcaga gagttacaac acagtgatag catttatgat tgatccgtat 60  
 g 61  
  
 <210> 38  
 <211> 85  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 38  
 gagttaccat atagcattga ttcattaatt gaccctgcct gtatttagat ccgtatgttg 60  
 gtgtgcttat tataactcag ccac 85  
  
 <210> 39  
 <211> 85  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 39  
 gagttaccat atagcattga ttcattaatt gaccctgcct atatttagat ccgtatgttg 60  
 gtgtgcttat tataactcag ccac 85  
  
 <210> 40  
 <211> 57  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 40  
 gagttaccat atagcattga ttcattaatt gaccctgcct gtatttagat ccgtatg 57

<210> 41  
<211> 38  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<400> 41  
gatggctgag ttataataag cacaccaaca tacggatc

38

<210> 42  
<211> 57  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide

<400> 42  
gagttaccat atagcattga ttcattaatt gaccctgcct atatttagat ccgtatg

57